DIRECT TESTIMONY OF

JOSEPH K. TODD

ON BEHALF OF

SOUTH CAROLINA ELECTRIC & GAS COMPANY

DOCKET NO. 2010-2-E

Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND POSITION WITH SOUTH CAROLINA ELECTRIC & GAS COMPANY ("SCE&G" OR "COMPANY").

A. My name is Joseph K. Todd, and my business address is 100 SCANA Parkway, Cayce, South Carolina. I am employed by South Carolina Electric & Gas Company as General Manager, Fossil & Hydro Operations.

Q. DESCRIBE YOUR EDUCATIONAL BACKGROUND AND YOUR BUSINESS EXPERIENCE.

A. I earned a Bachelor of Science Degree in Civil Engineering from Clemson University in 1980. I began my career with Duke Power that same year working as a structural engineer for several nuclear plants. I started working with SCE&G in 1981 as a Structural Engineer for V.C. Summer Nuclear Station in Jenkinsville, SC. In this capacity, I participated in the startup and initial operation of this facility and continued working at V.C. Summer until 1990. In 1990, I transferred to the Fossil/Hydro division of SCE&G and assumed a project management role

for initial work on the Cope project along with a number of other environmental projects. I also served as Assistant Manager of McMeekin Station from 1995 to 1998 before returning to a project management role for several environmental projects including Selective Catalytic Reduction ("SCR") installations at Williams and Wateree. Subsequent roles included Business Manager of the Company's power operations on the Savannah River Site, and Manager of Fossil/Hydro Outage Planning. I assumed the role of General Manager, Fossil & Hydro Operations in February of 2007. In this position, I report to the Vice President of Fossil Hydro Operations.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to review the operating performance of SCE&G's Fossil/Hydro units and South Carolina Generating Company's ("GENCO") Williams Electric Generating Station ("Williams Station") during the period January 1, 2009 through December 31, 2009 ("Review Period").

Q. PLEASE GIVE A SHORT DESCRIPTION OF SCE&G'S FOSSIL AND HYDRO ELECTRIC FACILITIES.

A. SCE&G operates ten (10) coal-fired fossil fuel units (2404 Megawatts ("MW")), eight (8) combined-cycle gas turbine/steam generator units (gas/oil fired, 1,326 MW), sixteen (16) peaking turbines (348 MW), four (4) hydroelectric generating plants (221 MW), and one Pumped Storage Facility (576 MW). In

addition, SCE&G owns an electric generator at a biomass cogeneration facility which produces an output of 90 MW using a mixture of wood products and coal as its fuel source. The total net non-nuclear summer generating capability rating of these facilities is 4,965 MW. The ratings stated in this testimony are updated at least on an annual basis.

Q. PLEASE DESCRIBE GENCO AND ITS RELATIONSHIP TO SCE&G.

A. GENCO was incorporated October 1, 1984, as a SCANA subsidiary. GENCO owns the Williams Station. GENCO sells to SCE&G the entire capacity and output from the Williams Station under a Unit Power Sales Agreement approved by the Federal Energy Regulatory Commission. Hereafter, when I refer to SCE&G's fossil steam plants, I include GENCO.

Q. HOW MUCH ELECTRICITY WAS GENERATED BY SCE&G IN THE REVIEW PERIOD?

A. In the Review Period, SCE&G generated 25,594,477 megawatt hours ("MWH") of energy. Of this energy, the fossil steam plants generated approximately 48%, the combined-cycle units generated approximately 26%, the nuclear plant generated approximately 18%, the peaking gas turbines and hydro facilities generated approximately 7%, and the biomass fuel contribution portion of the cogeneration facility generated approximately 1%. Exhibit No. ___ (JKT-1)

provides a graphic display of how the Company's generation met our customer's demand for energy during this Review Period.

Q. PLEASE SUMMARIZE THE PERFORMANCE OF THE FOSSIL/HYDRO UNITS.

A. SCE&G's fossil/hydro units operated efficiently and dependably in the twelve (12) month period from January 1, 2009 through December 31, 2009. Moreover, our fossil units received national recognition for their excellent heat rates. These measures will be covered later in my testimony. SCE&G also had an 87.15% availability factor and a 1.42% forced outage rate during the Review Period. Additionally, it is worth noting that SCE&G achieved a 96% availability factor during the peak summer load period between June 1st and September 30th of 2009.

Q. PLEASE DISCUSS THE MAJOR PROJECTS UNDERTAKEN DURING SCE&G'S PLANNED OUTAGES FOR THE PERIOD UNDER REVIEW.

A. As part of the Company's maintenance program, SCE&G undertook a number of major projects and maintenance activities during planned outages in this Review Period. A brief description of the major work completed is as follows:

- McMeekin Unit 1 came off line in the Spring of 2009 for waterwall and superheat tube replacements, major turbine inspections and low pressure turbine maintenance.
- Urquhart Unit 3 also came off line in the Spring of 2009 for a generator field and stator rewind and a major turbine inspection.
- Wateree Units 1 & 2 came off line in the Spring of 2009 for mechanical tie-in of a newly installed scrubber. The scrubber is not yet operational, and the plant continues to operate with the scrubber bypassed.
- Williams Station came off line in the Fall of 2009 for scrubber tie-in and final reheat loop tube replacements.
- Wateree Unit 1 came off line in the Fall of 2009 for generator field and stator rewinds and a major turbine inspection.
- Jasper Combined Cycle Unit 3 also came off line in the Fall of 2009 for its first hot gas path inspection and a gas turbine compressor upgrade.

Jasper Station continues to run well and plans are in place for replacement of the generator during Spring 2010.

Q. PLEASE DISCUSS ANY SIGNIFICANT FORCED OUTAGES FOR THE PERIOD UNDER REVIEW.

A. SCE&G's Fossil/Hydro Operations defines a significant forced outage as any forced outage in excess of seven (7) days. Fossil/Hydro did not have any significant forced outages during the Review Period.

Q. WHAT WAS SCE&G'S FOSSIL SYSTEM FORCED OUTAGE RATE FOR THE PERIOD UNDER REVIEW?

A. Fossil/Hydro experienced a system forced outage rate on its fossil units (including Combined-Cycle Units) of 1.42% in the Review Period. The "forced outage rate" is the percentage of the total hours that generating units are forced out of service (for various reasons) compared with the total hours in service for a period. For comparison purposes, the North American Electric Reliability Council ("NERC") national five year (2004-2008) average for forced outage rate for all units is 5.92%.

Q. PLEASE DISCUSS THE AVAILABILITY OF SCE&G'S FOSSIL PLANTS DURING THE REVIEW PERIOD.

A. SCE&G had an availability factor of its fossil plants (including Combined Cycle Units) of 87.15% for the Review Period. Availability factor is a measure of the actual hours that the generation units are available (overall readiness to provide electricity) divided by the total hours in the Review Period. Availability is not

affected by how the unit is dispatched or by the demand from the system when connected to the grid. However, it is impacted by the planned and unplanned shutdown hours. For comparison purposes, the NERC national five year (2004-2008) average for availability from all units was 87.32%. SCE&G's availability factor was slightly lower than the NERC national five-year average due to the major planned outages previously discussed in my testimony. However, during the summer peak period, June 1, 2009 through September 30, 2009, SCE&G operated at an availability factor of 96%.

Q. WHAT WAS THE HEAT RATE OF THE FOSSIL UNITS DURING THE REVIEW PERIOD?

A. Heat rate is a way to measure the thermal efficiency of a power plant. It is the number of British Thermal Units ("Btu") of fuel required to generate one (1) kilowatt-hour ("kWh") of electricity. The coal fired steam unit average system heat rate for the period January 1, 2009 through December 31, 2009 is 9,772 Btu/kWh. Cope Station had the best heat rate in our system at 9,053 Btu/kWh followed by Williams Station at 9,658 Btu/kWh and McMeekin Station at 9,847 Btu/kWh.

In the December 2009 issue of *Electric Light & Power*, SCE&G was recognized for having two (2) of its six (6) coal fired plants listed in the top 20 most energy efficient coal fired plants in the nation during calendar year 2008.

McMeekin Station ranked 4th at 9,387 Btu/kWh. Cope Station ranked 12th at 9,521 Btu/kWh.

Q. WHAT IMPROVEMENTS HAS THE COMPANY MADE TO REDUCE EMISSIONS AT ITS COAL FIRED PLANTS?

A. To comply with state and federal environmental laws and regulations concerning air quality, SCE&G installed SCR equipment at Cope Station in the Fall of 2008 in order to reduce Nitrogen Oxide (NOx) emissions. The SCR began full time operation on January 1, 2009 and has run well since that time. It is capable of reducing NOx emissions at Cope Station by approximately 90%. SCE&G is also utilizing the existing SCRs at Williams and Wateree Stations along with previously installed low NOx burner installations at the other coal fired units to meet the state and federal air quality requirements for NOx reductions.

Additionally, SCE&G is nearing completion of flue gas desulfurization equipment installations, commonly known as scrubbers, at Wateree and Williams Station to reduce sulfur dioxide (SO_2) emissions. The Williams scrubber was initially placed into startup in October 2009 and is operating reliably.

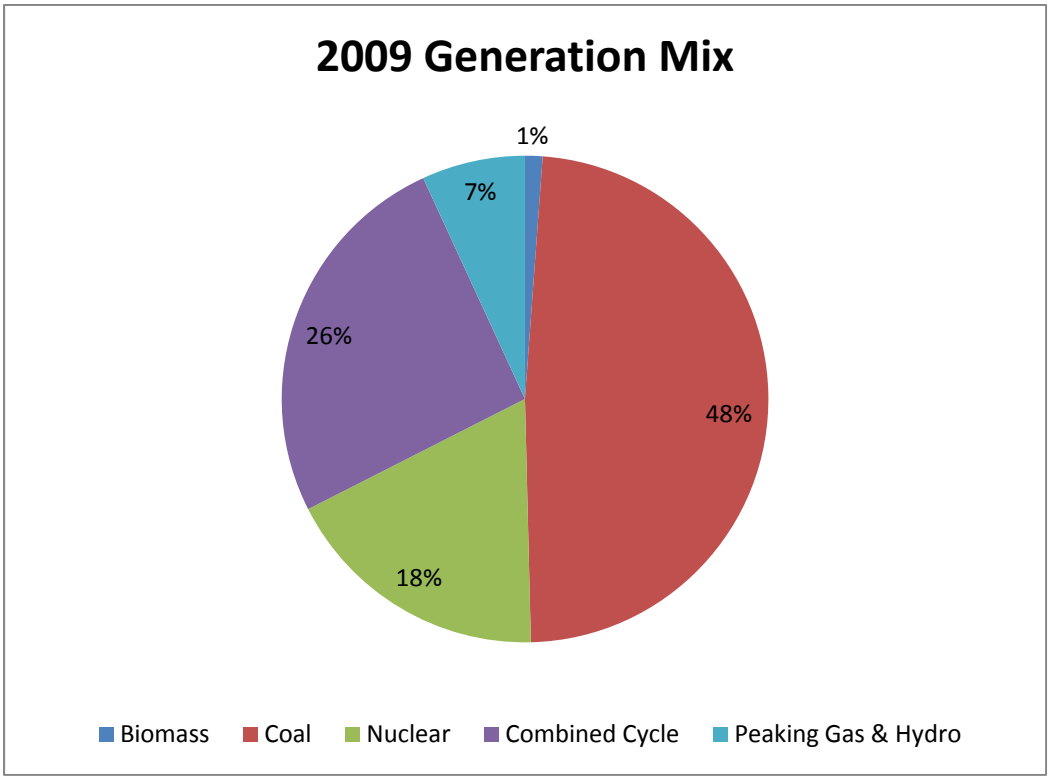
The Wateree scrubber equipment installation is essentially complete, but the startup of the scrubber was delayed by challenges to DHEC environmental permits for operation. DHEC's issuance of these permits was challenged before the Administrative Law Court ("ALC"), thereby temporarily delaying the final installation of the landfill and water treatment ponds necessary for operation of the

Wateree scrubber. The ALC denied all challenges to the permits. A subsequent appeal challenging the ALC's order has recently been filed with the South Carolina Court of Appeals, but is not expected to delay final project completion. SCE&G anticipates completing the Wateree scrubber project by Summer 2010 and thereafter placing the scrubber into full operation.

Please note that there also will be a reduction in mercury as a result of the wet scrubber installations. Although the installation of emission control equipment is essential to meet the requirements of environmental laws and regulations, it should be noted that SCE&G will still be a net consumer of SO_2 emission credits under EPA's trading program.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.


2009 Generation Mix
1%
7%
26%
48%
18%
Biomass
Coal
Nuclear
Combined Cycle
Peaking Gas & Hydro